February 2018

Agenda:

* Leveraging winter session for  Coding in the classroom -
  + Notes from the session are at the end of the PDF Coding in the Classroom on Figshare:
  + <https://figshare.com/articles/Computing_in_the_Classroom_Coding_for_Kids_Working_Session_ESIP_2018_Winter_Meeting_Tuesday_January_9_2_00pm_-_3_30pm/5811048>
* Discussion: Moving forward the Survey of ESIP members on education materials
* Sharing from Winter Session on Capstone projects
* Out2Lunch

Capstone:

LuAnn - action item - will look at the Capstone project content and report back

**Coding in the classroom** -

* Jupyter notebook component [LD]
* Block Coding component [BR]
* How to do include the data aspect
* How to apply the block coding to Earth science? [KH]
  + Arduino kit? Has programming code as components already; there are equivalents
  + Do cost money
* Project Guts (<http://www.projectguts.org/>) - has science integration
* Coding through applications
  + ImageJ -
    - GOES-R
  + StoryMap
  + 2x 2hr sessions
  + Post-workshop -- code club to continue the discussion
  + These can be recorded and shared

Goals:

Understand where the data is coming from

How to get to get something done

**Out to Lunch Webinars**

* April 11 - StoryMaps  … web mapping services, to pull in data
* April 25 - Image J … xy data onto a map
* May 9 - Sift
* May 23 - ?? ESRI? MyNASAData?
* [focus on one thing…

Moving forward w/ exploration of the programmable devices

* Kalo - lead a demonstration of the devices and how its used in a classroom
* Makey makey
* Arduino w/ a sensor & data logger
* 3-d printing?

**Links from today:**

[http://Code.org](http://code.org/) that integrates science concepts. <https://code.org/curriculum/science>

Project Guts: <http://www.projectguts.org/>

Sift:  <http://sift.ssec.wisc.edu/>

Starter kit: <https://www.amazon.com/gp/product/B01D8KOZF4/ref=oh_aui_detailpage_o01_s00?ie=UTF8&psc=1>

sensors:<https://www.amazon.com/gp/product/B01MG49ZQ5/ref=oh_aui_detailpage_o01_s00?ie=UTF8&psc=1>

Supplemental notes:

Capstone projects - Lewis Mcgibbney - JPL:

Our ESIP session titled “Capstone Projects: The Who, What, When, Where and How” [0], although sparsely attended, went very well. The slides are on Figshare at [1]

There were a number of notes taken which I think could be of interest to the Education Committee.

1. As far as session attendees understood, currently the entire Capstone program does not feature on the Education Committee scope of interest.
2. There is therefore the possibility for ESIP to engage with the Capstone program with one or a small number of universities with the focus being on students already internal to ESIP e.g. Student Fellows.
3. Prominent quote of the day, came from session attendee Peter Fox “Capstone is why our kids get jobs” (referring to the Capstone program being extremely influential in students from his institution obtaining employments).
4. Comments were made that engagement with Capstone could possibly broaden the Education Committee’s scope and purpose.
5. It could also be used as a mechanism to select high quality student fellows moving forward E.g. the mechanism to connect high quality students with career scientists…

That’s about as far as we got. I hope you all had a successful meeting. Please feel free to follow up with any questions.

[0] <http://sched.co/D6Di>

[1] <https://figshare.com/articles/Capstone_Projects_The_Who_What_When_Where_and_How/5782128>